SNC IPI **Physical and Chemical Changes Worksheet Answers**

1. What is the difference between a physical and chemical change?

*In a chemical change, something new is made.*

1. List the **clues** for a physical and chemical change below:

Physical Chemical

1. *change of state (s,l,g)* 1. *new colour*

2. *change of shape/form* 2. *heat/light is given off*

3. *dissolving*  3. *bubbles of gas*

 4. *precipitate*

 5. *new smell*

1. What is a precipitate?

*When a solid forms from two solutions (looks cloudy/chunky)*

1. Identify each of the following as a physical or chemical change and state the clue.

|  |  |  |
| --- | --- | --- |
| **Change** | **Physical or Chemical?** | **Clue** |
| Shattering glass | *P* | *Change of form/shape* |
| Folding a paper airplane | *P* | *Change of form/shape* |
| Car rusting | *C* | *New colour* |
| Dissolving flavour crystals in water | *P* | *Dissolving* |
| Making a campfire | *c* | *Heat/light is given off, new smell* |

1. What clues suggest that these changes are chemical?

|  |  |
| --- | --- |
| **Statement** | **Clue** |
| Bubbles form when baking soda is mixed with lemon juice | *Bubbles of gas* |
| Bleach turns a pink towel white | *New colour* |
| A match is struck and ignites | *Heat/light is given off, new smell* |

1. When a frozen pizza is placed in the oven, the cheese begins to darken and the crust becomes brown on the edges. Are these physical or chemical changes? What are the clues?

*Chemical – new colour, new smell*

1. Why is dissolving salt in water a physical change, not a chemical change?

*Nothing new is made – can get the salt back by evaporating the water*